



## Plant Fact Sheet TEXAS KIDNEYWOOD (*Eysenhardtia texana*)

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### INTRODUCTION

Texas kidneywood (*Eysenhardtia texana*) is a warm-season, native, perennial shrub that grows 2-3 meters in height (Correll & Johnston, 1996). Also called 'bee brush' (Jones, 1982) and 'vara dulce' (Everitt & Drawe, 1993), it is a member of the leguminosae or legume family. Texas kidneywood has spiky white flowers that are sweet smelling (Jones, 1982). The vegetative parts of the kidneywood give off a citrusy odor when crushed (Nokes, 1986).

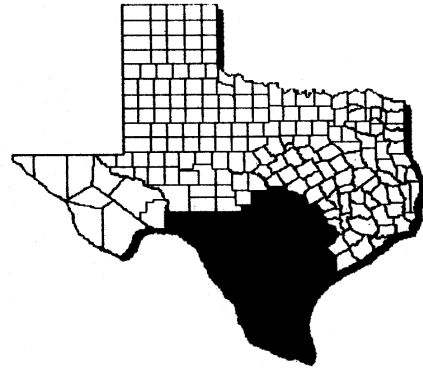
### ADAPTED AREA

It grows in Texas and south into Mexico (Correll & Johnston, 1996). In Texas, it can be found in the Trans-Pecos, Edwards Plateau, Southern Coastal Prairie and Rio Grande Plains regions (Correll & Johnston, 1996; Hatch, Gandhi, & Brown 1990). It tends to prefer calcareous soils and is found as part of brushy, chaparral vegetation (Correll & Johnston, 1996; Everitt & Drawe, 1993). Texas kidneywood prefers full sun or light shade. It is drought tolerant, but may temporarily defoliate under extended drought conditions (Nokes, 1986). It grows rapidly under moister conditions.

### USES

The leaves of the Texas kidneywood are browsed by livestock (Whisenant & Ueckert, 1982), white-tailed deer (Everitt & Drawe, 1993) and mule deer (Krausman, 1978). Steve Nelle (1984) considered it an "ice cream" plant for deer diet in South Texas, meaning that Texas Kidneywood is both highly palatable and highly nutritious. It is also of ornamental value because of its fragrant blooms, delicate foliage and branching growth form (Nokes, 1986). This is a good plant for use in deer food plots, and for native plant restoration projects. The nectar of the Texas Kidneywood also makes good honey, and dyes can be made from its wood (Nokes, 1986).

A related species called spiny kidneywood (*Eysenhardtia spinosa*) is also commonly



browsed by deer and livestock (Nokes, 1986). This low growing shrub can be found on rocky soils of Presidio County in the Trans-Pecos region of Texas, and south into Mexico (Correll & Johnston, 1996).

### ESTABLISHMENT

Texas Kidneywood can be grown from seed or from cuttings. Nokes (1986) suggests that seeds be started outdoors in March, or started earlier indoors. We found that Texas kidneywood germinates best when temperatures fall between 68 – 86°F and when there is about 12 hours of daylight. Colder temperatures have been known to reduce germination, whereas higher temperatures tend to reduce the survival of new seedlings. However, Texas kidneywood has been known to germinate with no light and temperatures from 15° to 40°C (Whisenant & Ueckert, 1982).

Kidneywood seeds can be planted hulled, or in the pod. Nokes (1986) recommends planting fresh untreated seeds. We have had success in germinating hulled seeds that have been stored in a seed cooler for as long as 25 years (see our PMC's Technical Note # 6, 1999). Dr. Richard Hoverson recommended to PMC staff in a 1993 personal communication that if planting seedpods, they should be pre-soaked in distilled water for 72 hours prior to planting, with the water being changed every 8 hours.

Seeds should be planted  $\frac{1}{4}$  to  $\frac{1}{2}$  " depth in a well drained planting medium. A shallower planting depth of  $\frac{1}{8}$ " is recommended for heavier, clay soil medium. We suggest that seedlings be started in small propagules such as a plug tray, or a germination tray as they are susceptible to damping-off when young. At the PMC, we use a shallow tray with a thin layer of gravel, covered with a layer of sand, and topped with 1 to  $\frac{1}{2}$  " of planting medium. Nokes (1986) recommends moving seedlings to larger containers once the kidneywood seedlings have three sets of true leaves. At this point, light fertilizer can be added to accelerate growth. Young plants may do better in light shade until they become better established (Nokes, 1986).

Texas kidneywood can also be grown from soft or semi-hardwood cuttings. Nokes recommends taking cuttings 4 to 6" long in the summer and early fall. We recommend a rooting hormone be used to facilitate root growth. Cuttings tend to root in 3 to 4 weeks.

We recommend that young plants be 6 to 9" in height when they are transplanted. The use of plastic plant shelters is beneficial to protect young plants from heavy browsing, reduce plant competition, and create a more friendly microclimate until the young plant can get established. Fall transplanting gives young plants more time to establish before summer heat arrives.

### Management

Texas kidneywood can be pruned from time to time to encourage a more compact growth form and encourage more blooms (Nokes, 1986). Seedpods should be harvested when they have turned brown and dry. Seeds are kidney-shaped, slightly- plump, and light to darker brown when matured. Seeds or pods should be dried at room temperature for several days before storing. Nokes recommends seeds or pods be fumigated prior to storing. We recommend storing seeds at cool temperatures and low humidity.

The PMC has a broad composite collection of Texas kidneywood, with small quantities of seed available to commercial seed nurseries.

### REFERENCES

- Correll, D. S., and Johnston, M.C., (1996).** *Manual of the Vascular Plants of Texas*. Richardson, TX: The University of Texas at Dallas.
- Everitt, J.H. and Drawe, D. L. (1993).** *Trees, Shrubs, and Cacti of South Texas*. Lubbock, TX: Texas Tech University Press.
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- Jones, F. B., (1982).** *Flora of the Texas Coastal Bend*. Sinton, TX: Welder Wildlife Foundation.
- Kika de la Garza PMC (1999).** *A Germination Study of Eighteen Accessions of Texas Kidneywood*. Technical Note v.2 (6). Kingsville, TX: USDA/NRCS.
- Krausman, P. R. (1978).** Forage relationships between two deer species in Big Bend National Park, Texas. *Journal of Wildlife Management*, 42, 101-107.
- Nelle, S. (1984).** *Key Food plants for Deer – South Texas*. From the proceedings of the International Ranchers Roundup, San Angelo, TX, 281-289.
- Nokes, J. (1986).** *How to Grow Native Plants of Texas and the Southwest*. Houston, TX: Gulf Publishing.
- Whisenant, S.G., and Ueckert, D. N. (1982).** Germination responses of *Eysenhardtia texana* and *Leucaena retusa*. *Journal of Range Management*, 35 (6), 748-750.

### WHERE TO GET HELP

Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government". The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture

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